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NEW COMBINATIONS IN AMERICAN VERNONIEAE (ASTERACEAE)

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ABSTRACT

Combinations are validated for **Joseanthus sparrei** and **J. trichotomus**, and additional combinations are made in *Critoniopsis*, *Lepidaploa*, *Lessingianthus*, and *Vernonanthura*.

KEY WORDS: Asteraceae, Vernonieae, *Critoniopsis, Joseanthus, Lepidaploa, Lessingianthus, Vernonanthura*, new combinations

In the publication establishing the new genus *Joseanthus* (Robinson 1989), basionyms of two of the species were incomplete. These are properly validated here.

Joseanthus sparrei (H. Robinson) H. Robinson, *comb. nov.* BASIONYM: *Vernonia sparrei* H. Robinson, Phytologia 34:302. 1976.

Joseanthus trichotomus (Gleason) H. Robinson, *comb. nov.* BASIONYM: *Vernonia trichotoma* Gleason, Bull. Torrey Bot. Club 52:190. 1925.

The following additional combinations are made in *Critoniopsis*, *Lepidaploa*, *Lessingianthus*, and *Vernonanthura*.

Critoniopsis aristeguietae (Cuatrec.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia aristeguietae* Cuatrec., Bol. Soc. Venez. Cienc. Nat. 21:304. 1960.

Lepidaploa balansae (Hieron.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia balansae* Hieron., Bot. Jahrb. Syst. 22:690. 1897.

The species was not placed in the genus earlier because of the presence of type A pollen (Robinson 1992) in the first specimens examined. Lophate grains have now been seen in other material, and reversion to type A apparently occurs in the present species. The raphids of the achene wall are elongate but smaller than usual for *Lepidaploa*.

Lepidaploa marguana (Cuatrec.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia marguana* Cuatrec., Bot. Jahrb. Syst. 77:57. 1956.

The failure to list this species in the earlier paper on *Lepidaploa* (Robinson 1990) was called to my attention by John Pruski. The pollen is type C.

Lepidaploa paraensis (H. Robinson) H. Robinson, *comb. nov.* BASIONYM: *Vernonia paraensis* H. Robinson, Phytologia 46:111. 1980.

The single available specimen has type A pollen, but this is considered a reversion within the genus. Other characters such as the habit, the long hairs on the outside of the corolla, and the elongate raphids of the achene wall place the species in *Lepidaploa*.

Lepidaploa pellita (H.B.K.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia pellita* H.B.K., *Nov. Gen. et Sp.*, ed. folio 4:28. 1818.

The species is known only from the type, but a photograph shows clear characters of *Lepidaploa*. The combination is made to facilitate use in floristic treatments.

Lepidaploa spixiana (Mart. *ex* DC.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia spixiana* Mart. *ex* DC., *Prodr.* 5:53. 1836.

Vernonia subcordata Gardn., Lond. J. Bot. 5:226. 1846.

The species is very similar in superficial aspect to *Lessingianthus regis* (H. Robinson) H. Robinson, and the latter is anomalous in *Lessingianthus*, in having a sclerified enlargement at the base of the style. Nevertheless, *Lepidaploa spixiana* is distinct in the critical characters of type G versus type B pollen and elongate versus short raphids in the achene wall. This *Lepidaploa* is also distinct in the thicker walled, shorter, less dense setulae of the achene, the presence of blister-like idioblasts on the achene surface, and the stiff straight hairs rather than numerous small glands on the outside of the corolla lobes.

Lessingianthus scabrifoliatus (Hieron.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia scabrifoliata* Hieron., Bot. Jahrb. Syst. 22:677. 1897.

The species was described from a Kuntze collection from Mato Grosso, Brazil, and additional material has been seen from Mato Grosso: Serra Ricardo Franco (15° S 60° W), May 1978, *Windisch 1995* (HB), *Marinon Barres s.n.* (HB); and Amazonas: Mun. de Humaitá, estrado Humaitá - Porto Velho, km 38, 8° S, 63° W, *Teixeira et al. 104.004* (NY,US) det. Pruski. The herbarium name *Vernonia velascens* Hieron. based on a Kuntze specimen from Dpto. Santa Cruz, Prov. Velasco, Bolivia is evidently the same species. Additional specimens seen from Prov. Velasco, Bolivia are *Seidel 594* (BOL,US) and *Nee 41145* (NY,US). The Teixeira specimen from Amazonas was compared with type material by Pruski.

Vernonanthura santacruzensis (Hieron.) H. Robinson, *comb. nov.* BASIONYM: *Vernonia santacruzensis* Hieron., 22:699. 1897.

The species is more robust than the related *Vernonanthura patens* (H.B.K.) H. Robinson, and has broader, short-petiolate leaves with broadly rounded blade bases. A specimen, BOLIVIA: Depto. Santa Cruz, *Nee & Coímbra 35235* (NY,US) has been compared with type material by John Pruski.

LITERATURE CITED

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